

**Region 9 Enforcement Division
75 Hawthorne Street
San Francisco, CA 94105**

Inspection Date(s):	9/30/15		
Time:	Entry: 1:00pm	Exit: 2:15pm	
Media:	Water		
Regulatory Program(s)	Clean Water Act NPDES /CAFO Dairy		
Company Name:	TIVA Dairy		
Facility or Site Name:			
Facility/Site Physical Location:	Ex. 6 Personal Privacy (PP)		
Geographic Coordinates:			
Mailing address:			
Facility/Site Contact:	Dickie Vander Meulen	Title: Owner/Operator	
	Phone: Ex. 6 Personal Privacy (PP)	Email:	
Facility/Site Identifier:	NPDES CAG018001 / Order R8-2013-0001, General waste discharge requirements for CAFOs (dairies and related facilities)		
NAICS:	112120 Dairy Cattle and Milk Production		
SIC:	0241 Dairy Farms		
Facility/Site Personnel Participating in Inspection:			
Name	Affiliation	Title	Email
Dickie Vander Meulen	TIVA Dairy	Operator	
EPA Inspector(s):			
John Tinger	EPA	Engineer	Tinger.John@EPA.gov
Federal/State/Tribal/Local Representatives:			
Edward Kashak	WRCB-R8	Engineering Geologist	ekashak@waterboards.ca.gov
Inspection Report Author:	John Tinger	415 972-3518	
		Date:	
Supervisor Review:			
	Ken Greenberg	415-972-3577	
		Date:	

SECTION I – INTRODUCTION

I.1 Purpose of the Inspection

The purpose of the inspection was to ensure compliance with the NPDES permit and applicable Federal regulations covering the discharge of wastewaters into waters of the United States.

Inspections were conducted jointly with the Regional Water Quality Control Board.

The facility has applied for coverage under NPDES CAG018001 / Order R8-2013-0001, General waste discharge requirements for CAFOs (dairies and related facilities) within the Santa Ana Region.

SECTION II – FACILITY / SITE DESCRIPTION

II.1 Facility Description

According to the EWMP, TIVA Dairy is a 42 acre site with approximately 13 acres of corrals, 6 acres of pasture, and 10 acres of lagoons. The facility generates 44,000 gallons per day of wastewater.

Washwater from the milking barn area gravity drains through underground pipes to the southern portion of the dairy where it is directed to one of 4 standpipes for discharge to the disposal area. The disposal area consists of 4 bermed areas which drain towards the eastern end of the facility. (see photo 1). The operator manually directs the wastewater to one of the 4 standpipes. At the time of the inspection, wastewater was actively flowing into the 2nd northernmost bermed area (photo 3). The operator stated wastewater has been directed to this bermed area for approximately 2 weeks. Previously, the northernmost bermed area had received wastewater (photo 4). At the time of the inspection, the solids in the northernmost area had been drying for approximately 2 weeks, and the operator stated he anticipates removing the solids within the month when the solids are sufficiently dry to accommodate equipment.

On the EWMP, the 4 bermed disposal areas are referred to as “pasture” and the EWMP does not indicate the presence of berms.

At the eastern end of the bermed areas, the berms are several feet lower to create a spillway into a ditch running alongside the eastern boundary (photo 8). The ditch was observed to contain heavy vegetation cover, especially in the southeast corner. The ditch directs wastewater northward back towards the center of the facility. At the end of the ditch, the operator has installed a pump (photo 10). When the ditch is full, the operator pumps wastewater to the northernmost disposal area where it infiltrates (photo 11). Excess wastewater from this pasture area may overflow to the center disposal area (photo 12).

Stormwater generally flows from the corrals towards the center and easterly direction to the disposal areas (photo 12). The soils in the disposal area were observed to be sandy and very porous. The operator noted the high percolation rates in this area, and stating that 2' of water will drain overnight. The operator rips the disposal area as needed to encourage infiltration in this area. The operator recently bought a new disc ripper to facilitate ripping the area.

The EWMP calculated a need to control 28 acre-ft of stormwater storage and 20 acre-ft of washwater. The EWMP used a runoff coefficient of 0.50 for corrals, and 0.15 for pasture area. The EWMP did not provide an explanation for the runoff coefficient, however other EWMPs reviewed in the Chino basin appeared to typically use around 0.90 for corrals. The EWMP calculated 8.3 acre-ft of evaporation and 16 acre-ft of percolation during winter months, for a storage need of 25 acre-ft.

SECTION III – OBSERVATIONS

- The EWMP calculations used runoff coefficients that assume a fairly high infiltration rate, potentially underestimating the retention volume required to contain wastewater on-site

SECTION IV – AREAS OF CONCERN

The presentation of areas of concern does not constitute a formal compliance determination or violation.

- The current configuration of the 4 bermed-areas, ditch, and pump are not included in the approved EWMP. The permittee does not appear to have notified the Regional Board in writing of changes to the EWMP.
- The 4 bermed areas currently being used appear to be functioning as wastewater ponds, however the operator has not installed depth markers nor is the operator tracking freeboard in weekly inspections.
- The ditch on the eastern border of the facility appeared to have excessive vegetation.

SECTION V – DOCUMENTS REQUESTED DURING INSPECTION AND ANALYTICAL RESULTS

- ✓ Engineered Waste Management Plan was available on-site
- ✓ Weekly Storm Water Management Structure Inspections Log Sheets were available on-site
- ✓ Annual Report was available on-site
- ✓ Manure Tracking Manifests were available on-site
- ✓ Manure nutrient analysis was available on-site
- NA Nutrient Management Plan NOT required.

APPENDICES

Appendix 1 – Inspection checklist

Appendix 2 – Photograph Log

Appendix 1- INSPECTION CHECKLIST

SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD
INSPECTION REPORT

OFFICE NO: _____
INSPECTOR: _____

PCA SYSTEM TASK NO.: _____

WDID No.	OWNER NAME	FACILITY NAME
NPDES No.	OWNER ADDRESS	FACILITY ADDRESS
Site ID	OWNER CITY, STATE & ZIP	FACILITY CITY, STATE & ZIP
Actual Date Inspected	OWNER CONTACT	FACILITY CONTACT
	OWNER PHONE NO.	FACILITY PHONE NO.

J Inspection Agency (S=STATE, J=JOINT STATE/USEPA)

INSPECTION TYPE (Check One)

- A1___ "A" type compliance--Comprehensive inspection in which samples are taken. (EPA Type S)
B1 X "B" type compliance--A routine nonsampling inspection. (EPA Type C)
02___ Noncompliance follow-up--Inspection made to verify correction of a previously identified violation.
03___ Enforcement follow-up--Inspection made to verify that conditions of an enforcement action are being met.
04___ Complaint--Inspection made in response to a complaint.
05___ Pre-requirement--Inspection made to gather info. relative to preparing, modifying, or rescinding requirements.
06___ Miscellaneous--Any inspection type not mentioned above. If this is an EPA inspection not mentioned above please note type. (e.g. biomonitoring, performance audit, diagnostic, etc.)

- Y Were violations noted during this inspection? (Yes/No/Pending Sample Results)
N Was this a Quality Assurance-Based inspection?
N Were bioassay samples taken? (N=no) If YES then, S= Static or F= Flow through.
N Were water quality samples collected?

INSPECTION SUMMARY

The overall facility rating, on a 1 (unreliable) to 5 (reliable) scale, was determined to be 3 = Satisfactory.

HISTORICAL INFORMATION (MOST RECENT):

Order No.	Adopted Date	Permit Type	Inspect Date	Inspection Type	Inspection Violations	Inspection Violation Type	Violation Date
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R8-2013-0001	6-7-13	NPDES					
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REVIEW OF FACILITY'S MOST RECENT ANNUAL REPORT

ANNUAL REPORT FOR: Jan 1, 2014 – Dec 31, 2014

ANIMAL POPULATION

Milk Cows: **1100** Dry Cows: **355** Heifers: **0** Calves: **0** Other: **0**

MANURE INFORMATION

Units used: tons

Amount of manure spread on cropland at the facility: 0

Amount of manure hauled away from the facility: 7242

Name(s) and address(es) of manure destination:

Hauler: DJ Arias & Sons Trucking,

Destination: Kellogg composting

Observations: 5 hauls were made in 2014.

ENGINEERED WASTE MANAGEMENT PLAN (EWMP) REVIEW

Did the inspector review the most recent EWMP on file? **YES**

Did the facility operator have a copy of the EWMP available onsite? **YES**

Date EWMP originally prepared: Sept 2005

EWMP prepared by: Nolte Beyond Engineering

Regional Board EWMP Acceptance Date: 10/14/05

EWMP Certification Letter Date and Source:

Was EWMP fully implemented? See description

If not, list structures missing or deficient:

Other information related to the EWMP:

OPERATOR INSPECTION PARTICIPATION AND INPUT, AND DESCRIPTION OF WATER CONTAINMENT SYSTEM

EPA Inspector presented credentials and a short introduction meeting was held. The operator accompanied inspectors through the facility. A short close-out meeting was held to discuss preliminary findings. Operator was not provided advanced notice of inspection.

INSPECTION OBSERVATIONS

ANIMALS ONSITE DURING INSPECTION;

Milk Cows: 1000 Dry Cows, Heifers & Calves total about 1,000:

INSPECTION SPECIFIC MANURE AND WASTEWATER INFORMATION:

DISCUSSION OF FACILITY HOUSEKEEPING:

No issues noted. Stockpiles of manure did not appear to have been present for more than 180 days.

TYPICAL DEPTH OF MANURE IN CORRALS: not determined.

DATE CORRALS WERE LAST SCRAPPED:

ESTIMATED FREEBOARD IN FULLEST LAGOON: See description.

DATE OF LAST LAGOON SOLIDS REMOVAL, PER FACILITY REPRESENTATIVE: See description

DISPOSAL LOCATION FOR LAGOON SOLIDS: Hauled with manure

INSPECTION SPECIFIC MANURE AND WASTEWATER INFORMATION (CONTINUED) :

CONDITION OF BERMS AND CONTAINMENT STRUCTURES:

Exterior berms appeared to be properly constructed. No rodent holes observed, minimal vegetation along tops of berms. Excess vegetation observed in ditches alongside berm.

OTHER INSPECTION OBSERVATIONS:

POTENTIAL VIOLATIONS (IF APPLICABLE)

- A marker was not placed within each pond or impoundment to indicate the minimum capacity necessary to contain all runoff and direct precipitation from the 25-year, 24 hour rainfall event.

The permittee does not appear to have notified the Regional Board in writing of changes to the EWMP in accordance with Part III. 6.E of the permit.

DATE OF POTENTIAL VIOLATION:

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DATE OF POTENTIAL VIOLATION DETERMINATION:
DESCRIPTION OF VIOLATION: **S**

**ADDITIONAL COMMENTS, SPECIAL INSTRUCTIONS, FUTURE INSPECTION FOLLOW UP
ETC.**

None.

Appendix 2 – Photograph Log

The photographs were taken during the inspection by John Tinger. Original copies of the photos are maintained by EPA Region 9.

1 – Facility overview.

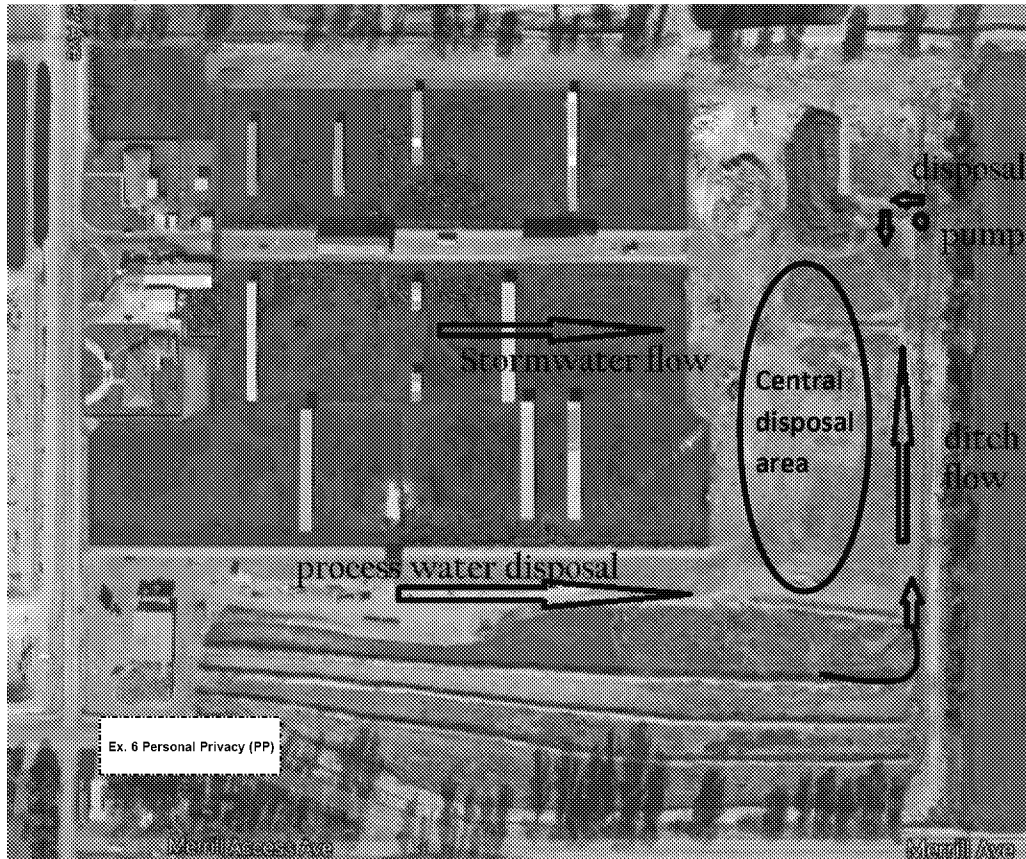


Photo 2: Manure stockpiling



Photo 3: 2nd (from north) bermed area actively receiving washwater from standpipe and flowing east. View looking east.



Photo 4: 1st (northernmost) bermed area with solids. View looking east.



Photo 5: 3rd (from north) bermed area inactive after solids have been removed. View looking east.



Photo 6: 4th (from north) bermed area inactive. View looking east.



Photo 7: Southeastern edge of facility. Bermed areas turn corner and flow is directed northerward into ditch. View looking west.

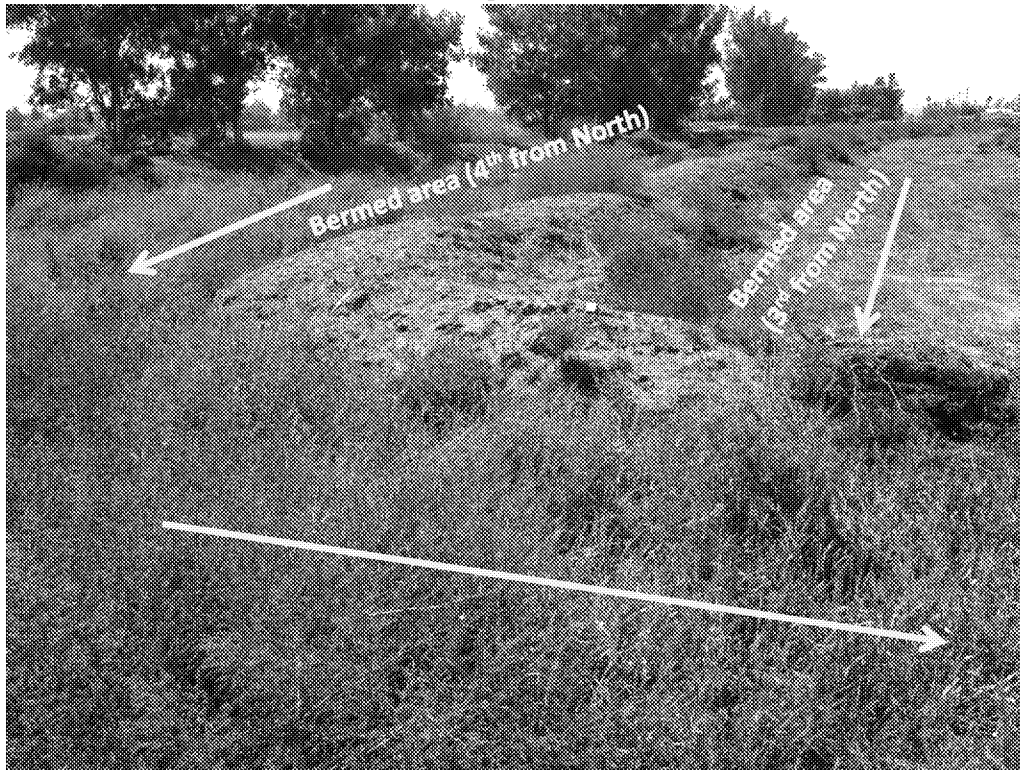


Photo 8 : Ditch and berm along eastern edge of facility. View looking North.



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Photo 9: Ditch and berm along eastern edge of facility. View looking south.



Photo 10: Pump in ditch



Photo 11: Disposal area adjacent to ditch for water pumped from ditch.



Photo 12: disposal area in center of eastern section of facility. This area receives stormwater flow from corrals, and receives any overflow from the disposal area in photo 11. The area is disked to promote infiltration. View looking northwest.

